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A CRITIQUE OF THE IDENTIFICATION AND TREATMENT OF HYPERACTIVE SCHOOL CHILDREN

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ABSTRACT

Hyperactive behavior emerged as a medically defined social problem during the 1960's. The structural (social, political, economic and legal antecedents of this social problem and the consequent educational policy transformations which shaped the identification and management of school children are considered here. Classroom management strategies shifted from moral to therapeutic control, since medical/psychiatric definitions of troublesome school behavior allow students to be managed within educational settings and offer benefits of humanistic, optimistic treatment and federal assistance monies. Attendant legal changes are also discussed. The consequences--often unanticipated consequences--of viewing and treating troublesome school behavior as a medical problem are highlighted.

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Hyperactivity[1] is the single most common behavioral symptom seen by childwork professionals (Ross and Ross, 1976; Whalen and Henker, 1980). Accurate prevalence rates are difficult to ascertain,[2] but estimates range from a conservative one to two percent of elementary public school children--about one-half million (Sandoval et al., 1980)--to an unlikely 20 percent--about seven million elementary public school children Huessy, 1973). The National Center for Education Statistics (1978) places the prevalence rate around five percent, or approximately 1.5 million school children.

"Attention Deficit Disorder" (ADD) is a medical diagnostic label applied to children who are identified as impulsive, inattentive and hyperactive, usually in the absense of demonstrable brain damage (American Psychiatric Association, 1980). ADD is considered a medical problem, a condition to be eradicated, and in this sense represents a deviance category (Freidson, 1970). Attempts to eradicate, correct, treat, punish or isolate forms of behavior distinguish deviance from just being different. Deviance and social control are interconnected.

"Hyperactivity" as a deviance category is complex.[3] First, while hyperactivity is deemed medical trouble, it is unusual in that there are rarely observable pathological signs within the organ system of the individual. Indeed, brain damage is not a criterion for diagnosing ADD, and in less than five percent of the cases are there neurological disorders (American Pychiatric Association, 1980).

The Diagnostic and Statistical Manual (3ed), or DSM-III, notes that clinicians are to cast a diagnosis of ADD on the basis of behavioral reports from adults—nonmedical persons--familiar with the child's round of experiences. Efforts to explain troublesome behavior in children, since the 1960's, have focused on medical and psychiatric accounts of child deviance. A consequence of this "medicalization of deviant child behavior" (Conrad, 1976) has been to rely on medical and psychiatric intervention to remedy troublesome school behavior. Drug therapy is the treatment of choice for school children diagnosed hyperkimetic (Safer and Allen, 1976).

Secondly, hyperactivity is used in a rather indiscriminant fashion. As a descriptive category, it is not confined to the medical sense of the term. Teachers may use "hyperactive" to describe a school child who has not received a medical diagnosis. What distinguishes a hyperactive child from one who is "overactive"? From a deviance and social control perspective, the distinguishing factor is that some formal, official action is taken to control the school child's behavior. Hyperactivity may be viewed as a medical category and as a deviance category. Medicine, then, serves as an agency of social control (Zola, 1972).

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MEDICAL ACCOUNTS OF HYPERKINESIS

Hyperactivity was first clinically described by George Still, a British pediatrician, in 1902. Still observed that children suffering from brain damage as a consequence of encephalitis or perinatal insult exhibited hyperactive behavior. Later, physicians observed hyperactive behavior in children who did not suffer from known brain damage. The dominant etiological explanation assumed brain damage in hyperactive children even if neurological damage was not demonstrable (Clements, 1966).

In 1937, Charles Bradley administered benzedrine (an amphetamine) to children in an institution of which he was the director. The amphetamine had a sedative effect on the children. This response has been termed a "paradoxical effect." At present, Ritalin (a stimulant drug) is the most widely used treatment for ADD.

Conrad (1976) argues that in order to employ medical social control technologies (e.g., psychoactive drugs), trouble must be understood from a medical perspective. In other words, the diagnostic category (hyperkinesis) must be available to rationalize medical therapy (drug treatment).

The medical definition of "hyperactivity" leaves a number of issues unresolved. First, because a school child's behavior is considered deviant, that does not mean troublesome behavior is a medical problem. There is an interesting reverse logic employed here. Clinicians and researchers note that if pediatric stimulants have an effect, then there must be an organic disorder. In tautological fashion, treatment implies etiology. Schrag and Divoky (1975: 66) note that "if the drug worked, or seemed to work, the subject must be suffering from an ailment for which the drug was administered. In many respects, the cure preceded the ailment." To view hyperactivity as sickness instead of badness does not clarify our understanding of troublesome school behavior.

Behavioral psychologists have noted that "hyperactive" school chilren do not demonstrate more units of behavior than "normal" school children. The distinction seems to be a matter of situationally inappropriate behavior (Ross and Ross, 1976). Distinguishing hyperactive from "normal" children is a social process occuring in a social arena. Deviance designations are made on the basis of behavioral reports and have little to do with neurological or other organic signs. To the extent that hyperactivity is defined as troublesome behavior, it is a social issue rather than a strictly medical one.

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THE EMERGENCE OF HYPERACTIVITY AS A SOCIAL PROBLEM

In his discussion of the "discovery" of hyperkinesis, Conrad (1976) poses two particularly important sociological questions: (1) how did hyperactive behavior come to be seen as a medical problem and (2) why did it emerge as medical trouble when it did. To answer these questions, Conrad (1976: 12-17) cites three social factors: (1) the psychopharmaceutical revolution of the late 1950's, (2) developments within the profession of medicine, and (3) government actions. The psychopharmaceutical revolution led to the synthesis and availability of psychotropic drugs. Ritalin, for example, the most widely prescribed drug for hyperkinesis, was synthesized in 1959 and won Food and Drug Administration approval for use in 1961.

Within the profession of medicine, child psychiatry emerged as a field of interest and respectability. Medical professionals began to use available psychotropic drugs to remedy psychiatric disorders and this practice extended to use in child patients.

Government support of the medical definition of hyperactive behavior developed during the 1960's. While the Gallagher (1970) Congressional subcommittee on government operations concluded that caution needed to be exercised when prescribing drugs for school children, the evidence suggests that the federal government approved of the medical definition of hyperactivity and of drug therapy (Clements, 1966; Freedman, 1971; National Institute of Mental Health, 1978).

By the 1960's, hyperactive behavior emerged as a category of medical trouble with implications for classroom management strategies. Psychoactive drugs began to be used in troublesome school children since former management practices were becoming unfeasible (Conrad, 1976; Conrad and Schneider, 1980). This shift in classroom social control practices reflects economic transformations and legal changes which influenced educational policy and practice.

The Gault Decision

The Gault decision by the United States Supreme Court in 1967 which guaranteed juveniles the right to due process made the expulsion or suspension of students more difficult. School officials began to adopt new management strategies. The number of students in public elementary schools identified as learning disabled for behavioral reasons rose from 99,000 in 1967 to well over 200,000 by 1970 (Dunn, 1973; United States Department of Education, 1980: 19). The consequences of the Gault decision were to shift classroom management from banishment to therapeutic control.

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The medical, therapeutic response to troublesome school children proved efficacious for a number of reasons. School officials need to keep students--especially middle class students--in the classroom to educate them to the demands of the labor market. Drug therapy allows management to be effected in the classroom. Secondly, the medical definition of hyperactive behavior is less stigmatizing than alternative labels, such as being morally incorrigible or mentally handicapped. Thirdly, medical ideology suggests an optimistic, humanistic and scientific approach to deviance while viewing the child deviant as not responsible for his or her troublesome behavior (Conrad and Schneider, 1980). Therapeutic control replaces the concept of punishment. Lastly, and perhaps most importantly, drug therapy is relatively inexpensive as a form of control. It cost about 25 cents per day to provide a child with pediatric stimulants; and parents pick up the medical costs.

Many forms of treatment have been proposed for hyperactive school children, such as special classroom environments, sophisticated special education teaching techniques, and school therapy programs, to name only a few (Knights and Bakker, 1980; Whalen and Henker, 1980). Since the 1960's, drug therapy has remained the treatment of choice for hyperactive behavior (Safer and Allen, 1976). This is not because drug therapy is necessarily more effective than alternative treatments; it is, however, cheaper.

Public Law 94-142

The development of hyperactive behavior as a social problem since the 1960's has been shaped by emergent economic factors and further legal changes. In 1975, Congress passed the Education for All Handicapped Children Act (PL 94-142). The Act mandates that school age handicapped children be guaranteed "a free and appropriate education." The legislation specifies that a multidisciplinary team of specialists evaluate any child presumed to have special needs and to determine the most appropriate educational setting for that child. Additionally, any child identified as handicapped must have an individualized education program (IEP) developed for him or her. The schools are to notify parents of the identification findings and to include parents in the decision making process regarding their child's treatment program. The law further mandates that the handicapped child be educated in "the least restrictive environment," and to the maximum extent feasible, each handicapped child should be included in the regular classroom with nonhandicapped children. While "mainstreaming," or including students with special needs in the regular classroom, is not explicitly mandated by PL 94-142, it is certainly implied, and schools have aimed at mainstreaming handicapped children as much as possible (United States Department of Education, 1980).

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There are, in addition, a number of important fiscal considerations written into the Act.

> Each participating state is slated to receive a supplement of 40 percent of the national average per pupil expenditure for each student being served. There is a ceiling of 12 percent on the number of students who can be considered handicapped and, currently, children with learning disabilities cannot exceed 1/6 of the total.
>
> The protections of the federal legislation extend to every qualifying child whether that child is counted (by the individual state) for fiscal purposes (Whalen and Henker, 1980: 352-353).

While a state my choose not to participate in the fiscal aspects of PL 94-142, most states currently are participating. New Mexico, for example, has opted not to participate since implementation costs are deemed too high. Since states must provide services to handicapped children anyway--under the provisions of an earlier act, PL 93-112--it is in the interests of the states to receive federal assistance monies.

Are hyperactive school children handicapped and therefore covered by the provisions of PL 94-142? The answer is "probably"; or more to the point, hyperactive school children have been processed under the provisions of PL 94-142. To the extent that a child is in need of an individualized education program, that child is handicapped. "Attention Deficit Disorder" (ADD) is the official diagnosis established by the APA (1980) for which hyperactivity is the prominent symptom. ADD qualifies as a learning disorder. PL 94-142 defines a learning disability as a disorder which "may manifest itself in imperfect ability to listen, think, speak, write, spell or do mathematical calculations" (Public Law 94-142, 1975: Sect b, 4). It is interesting to note that the medical diagnosis, ADD, maintains the concept of medical etiology while shifting emphasis toward the educational consequences of the disorder. It is in the interests of schools to adopt the medical view of hyperactivity since federal funding for hyperactive school children does not apply to disabilities "that result from emotional disturbance, or from environmental, cultural or economic disadvantage" (Whalen and Henker, 1980: 352). The medical view of troublesome school behaviors is supported in practice since educational program funding is tied to the medical view.

Unanticipated Consequences of Legal Change

The fiscal politics of PL 94-142 are complex. The federal government is to contribute 40 percent of the cost to educate hyperactive school children under the provisions of the law. This requires the individual states to pick up the remaining 60 percent of the cost. In the wake of the growing fiscal crisis, states will be hard pressed to meet the increased expenditures

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mandated under the Act. Moreover, in fiscal year 1979, the federal government actually contributed only 12.5 percent of the cost to educate handicapped children. The average expenditure per pupil was $1738. The average federal allocation was only $218 in 1979 (United States Department of Education, 1980: 20).

The provisions of PL 94-142 contributed to an increased number of school children being diagnosed as hyperactive (Whalen and Henker, 1980). Children, who, in the past, escaped diagnostic labeling, are being drawn into special programs since children must be identified to be treated--and to be counted for fiscal purposes.

The implementation of PL 94-142 would seem to reduce the number of school children on pediatric stimulants since emphasis is placed on educational intervention and parental participation. This does not appear to be the case. School districts are identifying hyperactive school children as required by law. However, educational programs for hyperactive school children are not being adequately developed. To decrease class size, to employ teacher aides, to train special education teachers and to develop special education programs are costly. States are heavily burdened with education expenditures and to increase tax revenues during a time of tax payer revolt is not a likely option. The federal government contributed over $20 million in fiscal year 1980 to train special educators, but states must pay their salaries. An estimated 64,000 new special education teachers and over 52,000 support staff are needed to meet the requirements of PL 94-142 (United States Department of Education, 1980: 7-8). At present only five states effectively monitor compliance with the provisions of PL 94-142.

All of which contributes to a continued reliance on drug therapy to treat hyperactive school children. The relationship between medical control and classroom management was strengthened in 1980 when the APA (1980) published its DSM-III. To diagnose ADD, the clinician must rely on behavioral reports. The APA advises: "signs must be reported by adults in the child's environment. Because the symptoms are typically variable, they may not be observed directly by the clinician....When the reports of teachers and parents conflict, primary consideration should be given to the teacher reports because of greater familiarity with age-appropriate norms" (American Psychiatric Association, 1980: 43).

In a study by Robins and Bosco (1973), 88 percent of the teachers surveyed were confident that they could identify hyperactive children in their classrooms. But teachers' "estimates of the prevalence of [hyperactivity] problems (15-20 percent of the children) far exceed those of other professionals" (Ross and Ross, 1976: 295). Moreover, Robins and Bosco found that teachers have relatively little knowledge about the potential ill effects of pediatric stimulants and do not hesitate

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to refer school children to physicians. And in a study by Sandoval et al. (1980), they found that 85 percent of the children referred to physicians received stimulant medication.[4]

ASSESSING HYPERACTIVITY IN SCHOOL CHILDREN

Behavior check lists are the principal means that teachers employ to identify hyperactive children in their classrooms. Behavior check lists are rating scales designed to determine whether or not a child is hyperactive. Generally, behaviors are listed on standardized forms and the teacher must fill out the response categories, such as "yes" or "no"; "very much," "pretty much," "just a little" or "not at all"; or a scale of 1 to 10 where 1 is "not at all" and 10 is "always." Some of the more widely used behavior check lists include Conners' Teacher Rating Scale (Conners, 1969), Bell, Waldrop and Weller Rating System (Bell et al., 1972), Davids' Rating Scale for Hyperkinesis (Davids, 1971), and Behavior and Temperament Survey (Sandoval, 1977).

Behavior check lists pose many problems regarding reliability and validity. For example, response categories like "yes" and "no," or "almost always," "frequently" and "almost never," may not prove reliable. A response like "frequently" subsumes a large frequency range of behaviors. One teacher's notion of "frequently" may not correspond to another's conception of "frequently." In an excellent discussion of the problems with reliability and validity of behavioral assessment tools, Kent and O'Leary (1976) review previous studies done with rating scales and point out the reliability and validity problems of specific rating tools.

Considering the operational definition of behavioral descriptions, ambiguity or lack of reliability exists between raters. For example, until recently, Conners' Teacher Rating Scale (Conners, 1969) was widely employed by classroom teachers to evaluate school children's behavior.[5] The survey consists of 39 behaviors and teachers must respond "not at all," "just a little," "pretty much" or "very much." The behaviors listed are often ambiguous, such as "appears to lack leadership," "acts 'smart'," or "does not get along with opposite sex." Teachers must work with behavioral categories and generalize from specific interactional events.

Regarding validity, a number of behavioral categories which purportedly measure hyperactivity are contradictory. For example, "submissive" and "defiant" "overly anxious to please" and "uncooperative," or "isolates himself from other children" and "teases other children or interferes with their activities," are all indicators of hyperactivity. Do these behavioral

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categories describe or define the hyperactive school child or are they perhaps a list of behaviors that teachers find troublesome in the classroom?

While behavioral check lists offer teachers ambiguous behavior descriptions and ambiguous response categories, teachers do rate school children's behavior. Despite the ambiguity, teachers carry on with the practical matter of getting things done in the classroom in a context of uncertainty surrounding the rating task. Behavior check list instructions do not hamper the enterprise. One rating scale instructions read: "Even though it may sometimes be difficult to make a judgment, please make a rating on one or the other side of the scale" (Ross and Ross, 1976: 320).

Using behavioral check lists as diagnostic tools poses problems. Medical diagnoses are made on the basis of rating scale data; data which may be contaminated by ambiguity, problems with reliability, and invalidity. A circular logic emerges. Some children suffer from a medical disorder, ADD. ADD children are identified by administering behavioral tests. The scores on the test determine who has this medical trouble. This reasoning is similar to the quip offered by a Harvard psychologist when he was asked, "what is intelligence?" He responded, "Intelligence is what the test tests." Regarding hyperactivity, Schrag and Divoky (1975: 131) offer a similar observation: "The tests [behavioral check lists] legitimates the (medical) categories, and the categories the tests."

Of those school children who come to the attention of a physician, the principal identifier of hyperactivity is the classroom teacher. To the extent that physicians must rely on teacher reports to cast a diagnosis, teachers--nonmedical professionals--participate in the medical diagnostic process. Hager notes

For while educators say they do not diagnose or treat hyperkinetic children, testimony presented in a 1970 Congressional hearing on the use of behavior modification drugs in grammar school children reveals that teachers...are actually involved in the diagnosis or misdiagnosis of hyperkinetic children (Hager, 1973: 338).

THE POLITICS OF MEDICALIZING TROUBLESOME SCHOOL BEHAVIOR

By employing medical, psychiatric language to account for troublesome school behaivor, we individualize what is essentially a social process. A medical diagnosis focuses on the individual as the source of trouble and the target for therapeutic action. Our attention is turned away from structural determinants influencing the identification and treatment of deviant persons.

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Regarding hyperactive school children, the medical perspective conceptualizes ADD as an organic problem with behavioral symptoms. Intervention is directed at the individual school child. It is in this sense that we are not invited to investigate educational patterns, school structure or classroom interactions as potential sources of troublesome school behavior.

There are many special education programs which do address these structural and interactional factors, but these programs tend to be expensive. During the current fiscal crisis, it is not likely that special educators will see expanded services for learning disabled school children.

The ways that hyperactive schol children are to be processed (in the immediate future) will be influenced by the implementation of Public Law 94-142. The current political and economic climate in the United States provides a ground for interest group conflict between the federal government, state governments and educators.

Classroom teachers are demanding more money, personnel and resources to implement PL 94-142 (NEA, 1979). State budget officials are reluctant to provide additional funds in the face of the current fiscal crisis. The political leverage of teachers will surely be tested in the near future. It remains to be seen whether the federal government will back teachers in their struggles with state officials over increased expenditures. While the federal government is committed to implementation of PL 94-142, the federal government is also committed to a course of turning over more fiscal and regulatory powers to individual state governments. States face the possibility of withdrawal of federal monies and the possibility of civil rights suits from teachers, students and parents if states do not comply with legal mandates.

The implementation of PL 94-142 distinctly affects the labeling of hyperactive school children. Given the provisions of PL 94-142, a school child must be identified as hyperactive in order to be treated and counted for fiscal purposes. The increased monitoring of and record keeping on school children contribute to the increased number of children classified as hyperactive; children who, in the past, escaped diagnostic labeling (Whalen and Henker, 1980).

The technology to diagnose and treat hyperactive school children adequately does not exist. But identification and treatment proceed nonetheless because the law requires it. Palfrey et al. (1978: 819) argue that PL 94-142 "assumes a sophistication of diagnostic ability and curriculum design that does not yet exist." Mnookin adds

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> ...in many areas what is best for an individual child or for children in general is usally indeterminate or speculative, and is not demonstrable by scientific proof, but it is instead fundamentally a matter of values (Mnookin, 1978: 163).

Since labeling is mandated in PL 94-142, the identification and treatment of hyperactive school children occurs even when diagnostic and treatment procedures pose a difficult if not impossible task (American Academy of Pediatrics,1970; Sroufe, 1975).

NOTES

1. "Attention Deficit Disorder (ADD)" is the medical/psychiatric diagnostic label; "hyperactivity" is a behavioral symptom of ADD (American Psychiatric Association, 1980). ADD was the diagnostic label adopted by the American Psychiatric Association (APA) in its Diagnostic and Statistical Manual (3ed), published in 1980. The Diagnostic and Statistical Manual (2ed), published in 1968, used the diagnostic label "hyperkinetic reaction of childhood," or "hyperkinesis." Other labels associated with hyperactive behavior include "minimal brain dysfunction (MBD)," "hyperkinetic behavior syndrome," and "minimal cerebral disorder," to name only a few. Clements, in 1966, identified 99 terms associated with hyperactive behavior.

2. National prevalence rates for ADD are not available. There have been local epidemiological studies on ADD (Cf Sandoval et al., 1980). However, it is difficult to generalize from these local studies to national prevalence rates. In part the difficulty stems from ambiguities surrounding the term "hyperactivity." Technically, only physicians may cast an official diagnosis. Yet, school officials may label a child "hyperactive," take management action, and never refer the child to a physician. Or, the child may be referred to a physician, not receive a diagnosis, and still be labeled "hyperactive" in the school setting.

3. Even when "hyperactivity" is used in a descriptive sense, there is often the implication that a medical source underlies the deviant behavior.

4. Sandoval and associates (1980) found that once a child is identified as hyperactive, this label does not typically stay with the child through his or her entire school career. It may well be the case that drugs "cure" the child, or it could indicate that teacher reports--the usual basis for diagnosis--are not reliable and not valid, varying between teachers from one grade level to the next.

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5. The currently employed Conners' Teacher Rating Scale consists of 20 scale items. Compared to the earlier scale, the recent survey attempts to measure troublesome school behavior generally and fewer of the items address hyperkinetic behavior in particular. To the extent that the interpretation of behaviors is notoriously ambiguous and predicated upon teachers' subjective reports, problems of reliability and validity continue to exist, regardless of revisions in the rating scale.

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